

IN THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 3. This sheet, which includes Fig. 3, replaces the original sheet including Fig. 3. The attached replacement sheet addresses the issues noted in the Notice of Draftsperson's Patent Drawing Review included with the Office Action.

Attachment: Replacement Sheet (Fig. 3)

REMARKS

The Office Action dated July 27, 2005 has been received and carefully noted. The above amendments to the claims, specification and drawings, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 6, 9, 13, and 14 have been amended to more particularly point out and distinctly claim the subject matter of the invention. New claims 22 and 23 have been added. No new matter has been added. Claims 1-23 are currently pending in the application and are respectfully submitted for consideration.

The Office Action objected to Fig. 3 of the drawings due to certain informalities. Applicants submit herewith a replacement sheet including Fig. 3 which corrects the deficiencies noted in the Notice of Draftsperson's Patent Drawing Review. Therefore, Applicants respectfully submit that the objection to the drawings is rendered moot.

The Office Action also objected to the title of the invention as allegedly not being descriptive. As discussed above, Applicants respectfully request that the original title, "IMPROVEMENTS IN A LOCATION SYSTEM," be replaced with a new title, "METHOD AND SYSTEM FOR LOCATING USER EQUIPMENT IN A COMMUNICATION NETWORK DURING HANDOVER." Consequently, Applicants respectfully submit that the objection to the title of the invention section is rendered moot.

Claims 1-21 were rejected under 35 U.S.C. §102(b) as being anticipated by Zadeh (U.S. Patent No. 6,047,182). Applicants respectfully submit that the present claims recite subject matter that is neither disclosed nor suggested by the cited prior art.

Claim 1, upon which claims 2-8 and 22-23 are dependent, recites a method of locating user equipment in a communication network. The method includes requesting a location of user equipment which is communicating on a first channel with a first serving base station, initiating a determination of the location of the user equipment, and handing over the user equipment for communicating on a second channel with a second different serving base station. The determination of the location of the user equipment is suspended until said handing over from the first serving base station to the second different base station has been completed.

Claim 9, upon which claims 10-12 are dependent, recites a system for locating user equipment in a communications network. The system includes a location entity and a controller configured to send a request to the location entity for locating user equipment which is configured to communicate on a first channel with a first serving base station. The location entity is configured to initiate a determination of a location of said user equipment. When the user equipment is being handed over to communicate on a second channel with a second different serving base station, the location entity is configured to suspend the determination of the location of the user equipment until handing over from the first serving base station to the second different serving base station has been completed.

Claim 13 recites a location entity for use in a system for locating user equipment in a communications network, the system including a controller. The location entity is configured to receive a request from a controller for locating user equipment which is configured to communicate on a first channel with a first serving base station, and initiate a determination of a location. The location entity is configured so that when the user equipment is being handed over to communicate on a second channel with a second different serving base station, determination of the location of the user equipment is suspended until said handing over from the first serving base station to the second different serving base station has been completed.

Claim 14, upon which claims 15-21 are dependent, recites a system for locating user equipment in a communication network. The system includes requesting means for requesting a location of user equipment which is communicating on a first channel with a first serving base station, initiating means for initiating a determination of the location of the user equipment, and handing over means for handing over the user equipment for communicating on a second channel with a second different serving base station. The determination of the location of the user equipment is suspended until said handing over from the first serving base station to the second different serving base station has been completed.

As will be discussed below, Zadeh fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

Zadeh discloses a communications system and method for managing physical channels during a positioning handover to a target Base Transceiver Station (BTS).

Zadeh allows for a positioning handover to occur from one channel type, such as a traffic channel of the serving BTS, to another channel type, such as a control channel of the target BTS. When congestion on one type of channel in the target cell occurs, the other type can be used.

Applicants respectfully submit that Zadeh fails to disclose or suggest critical and non-obvious elements of the present claims. For example, Zadeh fails to disclose or suggest suspending the determination of the location of the user equipment until handing over from the first serving base station to the second different serving base station has been completed, as recited in claims 1, 9, 13, and 14. As discussed above, embodiments of the claimed invention provides a method for locating user equipment in a communication network during handover. The determination of the location of the user equipment is suspended until the handover is complete. Applicants submit that the handover of the present invention, as recited in the claims and as would be understood by a person of skill in the art, is where user equipment having a service provided by a first serving base station is handed over to a second serving base station. Zadeh fails to disclose or suggest such an element.

Zadeh, as mentioned above, discloses a system for managing allocation of channels during a positioning handover. According to Zadeh, the serving base station makes a Timing Advance (TA) measurement as to the distance of the user equipment

from the base station, and then TA values are obtained for second and third target base station by performing a location handover (Zadeh, Column 4, lines 54-60). This handover, as disclosed in Zadeh, does not involve the user equipment being handed over to have service provided by the second base station. In fact, Zadeh specifically discloses that “unlike an ordinary handover, upon reception of a HANDOVER ACCESS message from the MS 200, the target BTS 210 only calculates the TA value, and does not respond to the mobile station 200, that is, no PHYSICAL INFORMATION is sent to the MS 200 (Zadeh, Column 3, lines 2-6). Accordingly, Zadeh does not disclose or suggest suspending the determination of the location of the user equipment until handing over from the first serving base station to the second different serving base station has been completed, as recited in claims 1, 9, 13, and 14.

For at least the reasons discussed above, Applicants respectfully assert that Zadeh fails to disclose or suggest all of the elements of claims 1, 9, 13, and 14. As such, Applicants respectfully request that the rejection of the claims, as being anticipated by Zadeh, be withdrawn.

Applicants note that claims 2-8, 10-12, and 15-23 are dependent upon claims 1, 9, and 14, respectively. Therefore, claims 2-8, 10-12, and 15-23 should be allowed for at least their dependence upon claims 1, 9, and 14, and for the specific limitations recited therein.

Applicants respectfully submit that the cited prior art fails to disclose or suggest critical and important elements of the claimed invention. These distinctions are more

than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-23 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Replacement Sheet (Fig. 3)